

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/053093 A1**

(51) International Patent Classification<sup>7</sup>:

**H01Q 3/08**

(21) International Application Number:

PCT/KR2004/000583

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(22) International Filing Date: 17 March 2004 (17.03.2004)

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(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

10-2003-0085296

27 November 2003 (27.11.2003) KR

10-2004-0003631 19 January 2004 (19.01.2004) KR

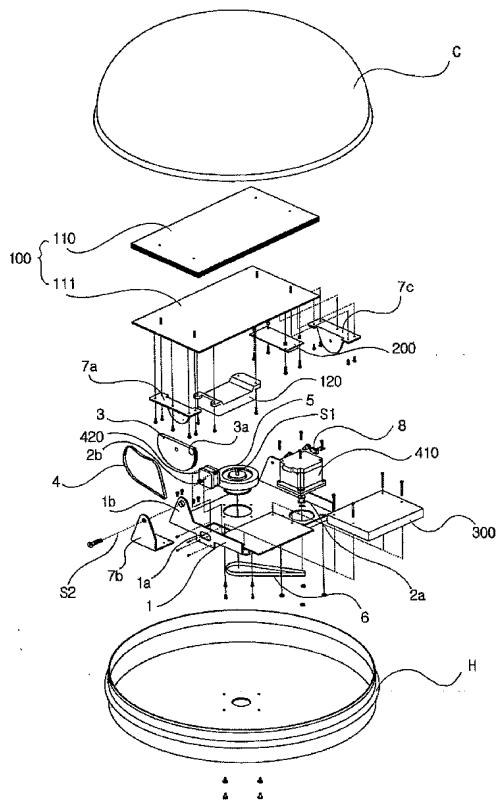
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

*[Continued on next page]*

(54) Title: IMPROVED ANTENNA SYSTEM FOR TRACKING MOVING OBJECT MOUNTED SATELLITE AND ITS OPERATING METHOD



(57) Abstract: An improved satellite tracking antenna system mounted to a moving object and a method for operating the same detect and track elevation and azimuth angles of a satellite using only two gyro sensors in a two-axis satellite tracking antenna system, and detect and track an azimuth angle of the satellite using only one gyro sensor in a one-axis satellite tracking antenna system. The antenna system detects the satellite position using two gyro sensors, which are mounted to be orthogonal to each other to a planar axis perpendicular to a satellite-directed target point of the antenna, and continuously tracks the satellite position using a calibration algorithm without using additional absolute angle sensors, resulting in simplified system configuration and reduced production costs.

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Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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**Published:**

— *with international search report*